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Article 2 - COVID Vaccines

In an effort to pursue herd immunity for SARS-CoV-2, the virus that can lead to COVID-19, the United States Food and Drug Administration (FDA) has granted emergency use authorization (EUA) for three vaccines, Pfizer-BioNTech, Moderna, and Johnson & Johnson/Janssen (J&J). Although the Centers for Disease Control and Prevention (CDC) stated that the “COVID-19 vaccines are safe and effective,” many are skeptical. Following the CDC’s statement, seven cases of cerebral venous sinus thrombosis, a type of blood clot, have been linked to the J&J vaccine, further raising uncertainty towards inoculation.

With the objective to achieve vaccine safety and immunogenicity against SARS-CoV-2, studies performed in clinical trials have demonstrated a 95% effective rate for Pfizer-BioNTech, 94.1% for Moderna, and 66.3% for J&J, according to the CDC. While J&J holds the lowest efficacy rate, a new concern has emerged for Janssen Pharmaceuticals. Seven cases of blood clots were detected in those inoculated with the J&J vaccine. With the cases countering the CDC’s claim about vaccine safety, hesitancy towards inoculation has become solidified.

“J&J has fewer injuries reported than the other two vaccines,” stated Jenna Funderburk, a representative at Informed Consent Action Network, an anti-forced vaccination group in the United States. “Considering the fact that there have been more significant injuries from the others and have never been acknowledged, it makes me question the CDC and FDA’s motives, and that further supports why they can’t be trusted.” With a decrease in trust in the nation’s leading public health agencies, fewer people are willing to get inoculated.

On the other hand, not all have turned against the vaccines in light of the cases. According to Hector Villa, a Surgical Technologist at the Riverside Community Hospital in

Riverside, California, “Of the 200 million+ doses administered in the United States, 7 cases of cerebral venous sinus thrombosis have been reported. The chance of dying from COVID is roughly 1.8% which means we are 20,454 times more likely to die from COVID than to develop a blood clot from the J&J vaccine, so the CDC’s statement that the vaccines are safe and effective is correct.”

With an increase in vaccinations inching the United States closer to their goal of herd immunity, many are alarmed by the rate at which the vaccines were released to the public. In addition, the link between the J&J vaccine and blood clotting has caused further unease. “The rapid development and approval of these vaccines make us hesitant about the safety and effectiveness of them which is why the J&J cases weren’t a surprise, only adding fuel to the fire,” said Funderburk. On April 13, 2021, the CDC and FDA “recommended a pause in the use of Johnson & Johnson’s Janssen COVID-19 Vaccine,” allowing researchers to study the possible link between the vaccine and blood clots.

Although the vaccines were approved and issued in less than a year, “over fifteen years of research has been incorporated into them,” said Villa. “We have faced coronavirus outbreaks numerous times before 2019. In 2002, the SARS outbreak sparked panic in Southeast Asia and tremendous research was conducted on the virus. After another outbreak in 2015, more studies were conducted and a vaccine was already underway but was never completed until the outbreak in Wuhan in 2019.”

Although COVID-19, caused by a novel of the coronavirus SARS-CoV-2, is a new and infectious disease, scientists are familiar with the virus that the strain originates from as it dates back to the 1960s. With years of research paving the way for a coronavirus vaccine, researchers were able to produce and distribute the COVID-19 vaccines at warp speed.

Despite the years of preceding research that have proven vaccines to be safe and effective, doubt still remains. “We’ve been trying mRNA vaccines for 20 years, and none of them have been tested or passed because once they get to the animal studies,” Funderburk insisted. “The animals are exposed to the wild virus, they die. They all die. When someone tells you they know the vaccines are safe and effective, they’re lying because there’s no science to back it up.”

mRNA vaccines are a newly developed messenger vaccine that teaches our cells to produce spike proteins that are found on the surface of SARS-CoV-2. Of the three vaccines distributed in the United States, Pfizer-BioNTech and Moderna use mRNA technology, while J&J uses adenovirus to carry genetic material into the cell, also known as the viral vector. With concerns about safety and long-term health issues, vaccine demands have declined in parts of Louisiana, Texas, Iowa, and Georgia.

Despite the increase in vaccine resistance and a call for a pause in the J&J vaccine, 10,026,098 additional vaccinations of at least one dose have been administered since April 13, 2021, pushing the United States closer to its goal of herd immunity.